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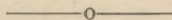
ILLINOIS STATE BOARD OF HEALTH.

PREVENTABLE-DISEASE CIRCULARS.

NO. 3--SCARLET FEVER.



SCARLET FEVER.



SCARLET FEVER is, pre-eminently, the contagious disease of childhood. Although all ages are liable to the disease, the chances of attack rapidly diminish after the fifth year. This predisposition of childhood is attributed to the feeble resisting power of early life. For the same reason, the chances of recovery and of escape from its serious after-effects increase with the age of the individual.

These considerations should lead to especial care in guarding young children from danger of exposure to the contagion of Scarlet Fever. The common theory of too many mothers and nurses—that “the diseases of childhood are to be expected anyway; there is no use in attempting to guard children from their distinctive diseases;”—is mischievous in the extreme, and should be refuted by all sanitarians, health officers, and family physicians. Because a certain class of diseases are more prevalent and more dangerous in early life, and grow less frequent and less fatal as the vigor and fullness of adult life are approached, would seem to be common-sense reasons why the infant and young child should be all the more carefully guarded against exposure to them*—and this is especially true of the disease under consideration.

As in other contagious diseases, there are two important matters demanding attention in order to prevent the spread of Scarlet Fever. The first is to *isolate* the patient—to separate the sick from the well. The second is to destroy, at once and effectually, everything which comes from the body of the patient—before it can infect anything else, if possible; if not, then to subject everything likely to be infected to such treatment as will destroy the poisonous property.

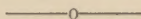
*Since one attack of Scarlet Fever usually suffices to prevent subsequent ones, the question has sometimes arisen as to the propriety of intentionally exposing children to the contagion during exceptionally mild epidemics of the disease. This is a question which must, in all cases, be decided by the family physician. And it should not be forgotten that even a mild case in one child may communicate a malignant attack to another.

The Scarlet-Fever poison is contained in the breath and discharges of the patient, and especially in the skin which peels off at the close of the attack, and may be scattered through the air in tiny scales or powder. These particles may settle down in undusted corners, or lodge in clothing, carpets, bedding, etc.; and, as they retain their poisonous property for an indefinite period, may kindle an epidemic whenever dislodged to come in contact with susceptible subjects.

The instructions, which follow, with reference to the care of the sick, and especially those with reference to the means of destroying the poison, should be conscientiously carried out in every household where there is a case of Scarlet Fever. In a sanitary sense, every person is his brother's keeper where contagious disease is concerned. Concealment, or neglect of known necessary precautions, whereby contagion is spread, may be as murderous in effect, whatever the intent, as the club of Cain itself.

If the instructions here set forth were faithfully followed in every case of Scarlet Fever, for a comparatively brief space of time, its poison could be entirely eradicated,—and this scourge of childhood would soon cease to fill mothers' hearts with dread and anxiety.

SCARLET FEVER—ITS PREVENTION AND CONTROL.



1. During the existence of Scarlet Fever in a community, all cases of sore throat, with fever, are to be looked upon with suspicion until their innocent character is established.

2. If a child, who has not previously had an attack of Scarlet Fever, should, unfortunately, be exposed to a case, it should be carefully watched during the following two weeks. Upon the first symptoms of shivering, lassitude, headache, frequent pulse, hot, dry skin, flushed face, furred tongue, with much thirst and loss of appetite, the child should immediately be separated as completely as possible from other members of the household and all other persons, until a physician has seen it and determined whether it has Scarlet Fever. All persons known to be sick with this disease (even those but mildly sick) should be promptly and thoroughly isolated from the public. This is of quite as much importance as in a case of small-pox.

3. As soon as it is determined that the disease is Scarlet Fever, the following precautions should be scrupulously carried out. These are substantially the same as already recommended by the STATE BOARD OF HEALTH, in the Circulars on Small-Pox and Diphtheria:

The Sick-Room.—The room selected for the sick should be large, easily ventilated, and as far from the living and sleeping-rooms of other members of the family as it is practicable to have it. All ornaments, carpets, drapery, and articles not absolutely needed in the room, should be removed. A free circulation of air from without should be admitted both by night and day—there is no better disinfectant than pure air. Place the bed as near as possible in the middle of the room; but care should, of course, be taken to keep the patient out of draughts.

If the room connects with others which must be occupied, lock all but one door for entrance and exit, and fasten to the door frame—top, bottom and sides—sheets of cheap cotton cloth, kept wet with *Thymol Water* (see page 9) or chloride of zinc solution—two drachms chloride of zinc to a half gallon of water. Over the door to be used, the sheet must not be tacked at the bottom nor along the full length of the lock-side of the frame, but about five feet may be left free to be pushed aside; this sheet, however, must be long enough to allow ten or twelve inches to lie in folds on the floor, and must, also, be kept wet with the disinfectant.

Precautions in the Sick-Room.—All discharges from the nose and mouth of the patient should be received on rags and immediately burned. Night-vessels should

be kept supplied with a quart or so of the *Copperas Disinfectant* (see page 9) into which all discharges should be received. All spoons, dishes, etc., used or taken from the sick-room, should be put in boiling water at once.

A pail or tub of the *Zinc Disinfectant* (see page 9) should be kept in the sick-room, and into this all clothing, blankets, sheets, towels, etc., used about the patient or in the room, should be dropped immediately after use, and before being removed from the room. They should then be well boiled as soon as practicable.

Attendants.—Not more than two persons—one of them a skillful, professional nurse—should be employed in the sick-room, and their intercourse with other members of the family should be as much restricted as possible.

In the event that it becomes necessary for an attendant to go away from the house, a complete change of clothing should be made, using such as has not been exposed to infection; the hands, face and hair should be washed in thymol water or chloride of zinc solution.

Miscellaneous.—No inmate of the house, during the continuance of the disease, should venture into any public conveyance, or assemblage, or crowded building, such as a church or school; nor, after its termination, until permission is given by the health authorities.

Letters must not be sent from the patient, and all mail-matter from the house should first be subjected to a dry heat of 250–260 deg. F.

Domestic animals, dogs, cats, etc., should not be allowed to enter the room of the patient, or, better still, should be excluded from the house.

During the entire illness the privy should be thoroughly disinfected with the *Copperas Disinfectant*, three to five gallons of which should be thrown into the vault every three or four days. Water-closets should be disinfected by pouring a quart or so of this disinfectant into the receiver after each use.

Care after Recovery.—There is danger of communicating the disease directly, from one recovering from Scarlet Fever, so long as there is any soreness of the eyes, nose or air-passages; or any symptom of dropsy; but, more especially, so long as the skin continues to peel off. Although this latter process is usually completed within about forty days from the beginning of the sickness, cases happen, sometimes, when it lasts even seventy or eighty days. No matter how long this period may be, the child must be considered dangerous until all scaling or peeling of the skin has ceased. Vaseline, cosmoline, olive oil or lard should be used, in the discretion of the attending physician, to anoint the skin, in order to prevent the scales from being scattered about and so spreading the contagion.

When recovery is complete, and the skin smooth and free from scales, the child should be bathed all over, at least twice or oftener, and the hair thoroughly washed each time, before being allowed to leave the house. This bathing should be under the direction of the family physician, at such times and in such manner as he thinks prudent. The addition of a gill of thymol water to each gallon of the bath is recommended.

4. No person after recovering should appear in public wearing the same clothing worn while sick or recovering from Scarlet Fever, until such clothing has been thoroughly disinfected, and this without regard to the time which has elapsed since

recovery. Nor should a person from premises in which there is or has been a case of Scarlet Fever attend any school, Sunday school, church, or public assembly, or be permitted by the health authorities or by the school board to do so, until after disinfection of such premises and of the clothing worn by such person if it has been exposed to the contagion of the disease.

5. Cases of Scarlet Fever should be promptly reported to the proper health authority, either by the attending physicians or by the householders. Plain and distinct notices, in the form of placards, should be placed upon the house or premises where there is a case of Scarlet Fever, and children, especially, should not be allowed to enter such house. Notice should also be given to all public schools, of the locality of any house in which there is Scarlet Fever, and the scholars should be cautioned against visiting or playing on the infected premises.

6. Immediately upon receipt of notice of the existence of a case of Scarlet Fever, the health officer should visit the locality and secure proper compliance with the precautions above set forth. He should see that the prompt placards are duly posted; should notify the schools; take charge of funerals of those dying of this disease; superintend the disinfection of rooms, clothing and premises; and, finally, give official certificate of recovery, and of freedom from liability to communicate the disease to others. Until these latter are issued, a rigid system of isolation or quarantine should be maintained with regard to an infected house and its contents—persons and things.

Where there is no health officer, the attending physician should see that these precautions are carried out.

7. In the event of death, the clothing in which the body is attired should be sprinkled with thymol water, the body wrapped in a disinfectant cerecloth (a sheet thoroughly soaked in the *Zinc Disinfectant, double strength*), and placed in an air-tight coffin, *which is to remain in the sick room until removed for burial*. No public funeral should be allowed, either at the house or church, and no more persons should be permitted to go to the cemetery than are necessary to inter the corpse.

The health authorities should take charge of burials, and superintend the preparation of the bodies; or, in the absence of such authorities, the attending physician should direct the undertaker as to these matters.

8. After recovery or death, all articles worn by, or that have come in contact with the patient, together with the room and all its contents, should be thoroughly disinfected by burning sulphur. To do this, have all windows, fire-places, flues, key-holes, doors, and other openings, securely closed by strips or sheets of paper pasted over them. Then place on the hearth or stove, or on bricks set in a wash-tub containing an inch or so of water, an iron vessel of live coals, upon which throw three or four pounds of sulphur. All articles in the room and others of every description that have been exposed to infection, which cannot be washed or subjected to dry heat, and are yet too valuable to be burned, must be spread out on chairs or racks; mattresses or spring-beds set up so as to have both surfaces exposed; window shades and curtains laid out at full length, and every effort made to secure thorough exposure to the sulphur fumes. The room should then be kept tightly closed for twenty-four hours. After this fumigation—which it will do no harm to

repeat—the floor and wood-work should be washed with soap and hot water, the walls and ceiling whitewashed, or, if papered, the paper should be removed. The articles which have been subjected to fumigation should be exposed for several days to sunshine and fresh air. If the carpet has unavoidably been allowed to remain on the floor during the illness, it should not be removed until after the fumigation; but must then be taken up, beaten and shaken in the open air, and allowed to remain out of doors for a week or more. If not too valuable, it should be destroyed; but, whenever practicable, it should be removed from the room at the beginning of the illness.

After the above treatment has been thoroughly enforced, the doors and windows of the room should be kept open as much as possible for a week or two. Where houses are isolated articles may be exposed out of doors. The entire contents of the house should be subjected to the greatest care, and when there is any doubt as to the safety of an article, *it should be destroyed*.

All this work should be done—both the disinfection and the destruction of property—under the direct supervision of the local authorities, or attending physician.

9. Such articles as clothing, bedding, etc., as can be washed, should first be treated by dipping in the *Zinc Disinfectant*; they should then be immediately and thoroughly boiled.

The ticking of beds and pillows used by the patient should be treated in the same manner, and the contents, if hair or feathers, should be thoroughly baked in an oven. If this cannot be done, they should be destroyed by fire, as should, in any event, all straw, husk, moss or “excelsior” filling. The clothing of nurses should be thoroughly fumigated and cleaned before it is taken from the house, or, better still, burned, if feasible.

Best Disinfectants.

Sunlight, fresh air, soap and water, thorough cleanliness—for general use.

For special purposes the following are the most efficient, the simplest and the cheapest.

I.—Copperas Disinfectant.

Sulphate of iron (copperas).....one and one-half pounds.
Water.....one gallon.

A convenient way to prepare this is to suspend a basket containing about sixty pounds of copperas in a barrel of water. The solution should be frequently and liberally used in cellars, privies, water-closets, gutters, sewers, cess pools, yards, stables, etc.

II.—Sulphur Disinfectant.

Roll sulphur (brimstone) two pounds.

To a room ten feet square, and in the same proportion for larger rooms. See *Rule 8* for mode of use.

III.—Zinc Disinfectant.

Sulphate of zinc (white vitrol).....one and one-half pounds.
Common saltthree-quarters of a pound.
Water.....six gallons.

For application and modes of use see *Rules 3* and *7*.

IV.—Thymol Water.

Made by adding one tablespoonful *Spirits of Thymol* to half a gallon of water. *Spirits of Thymol* is composed of—

Thymolone ounce.
Alcohol, 85 $\frac{p}{ct}$three ounces.

May be used for all the disinfectant purposes of carbolic acid; it is quite as efficient in the strength here given, and has an agreeable odor. See *Rules 3* and *7* for application and uses. Where thymol is not available, chloride of zinc solution may be used—half an ounce of chloride of zinc to one gallon of water.

THIS CIRCULAR SHOULD BE PRESERVED FOR REFERENCE,

